

### Abstract of the Disclosure

A hybridoma producing a monoclonal antibody recognizing the C-terminus of human brain natriuretic peptide (hBNP) was cultivated in a medium or the abdominal cavity of a mouse to recover the monoclonal antibody from the medium or ascites accumulated in the abdominal cavity. An immunoassay for hBNP was established using the monoclonal antibody. The immunoassay for hBNP of the invention is so sensitive that the minimum detection limit is 1 pg/ml and can therefore determine the hBNP level in blood plasma directly, without the extraction of hBNP from blood plasma. It is useful for diagnosing diseases such as hypertension and the like, and states of the heart, kidney, and the like by using the increase/decrease of the hBNP level as an index.